

Fig.1.

FOR TEXT ENTRY VIA A KEYPAD

Inventors: Justine E. Coates et al.
Docket No.: MSFT120218

2/5

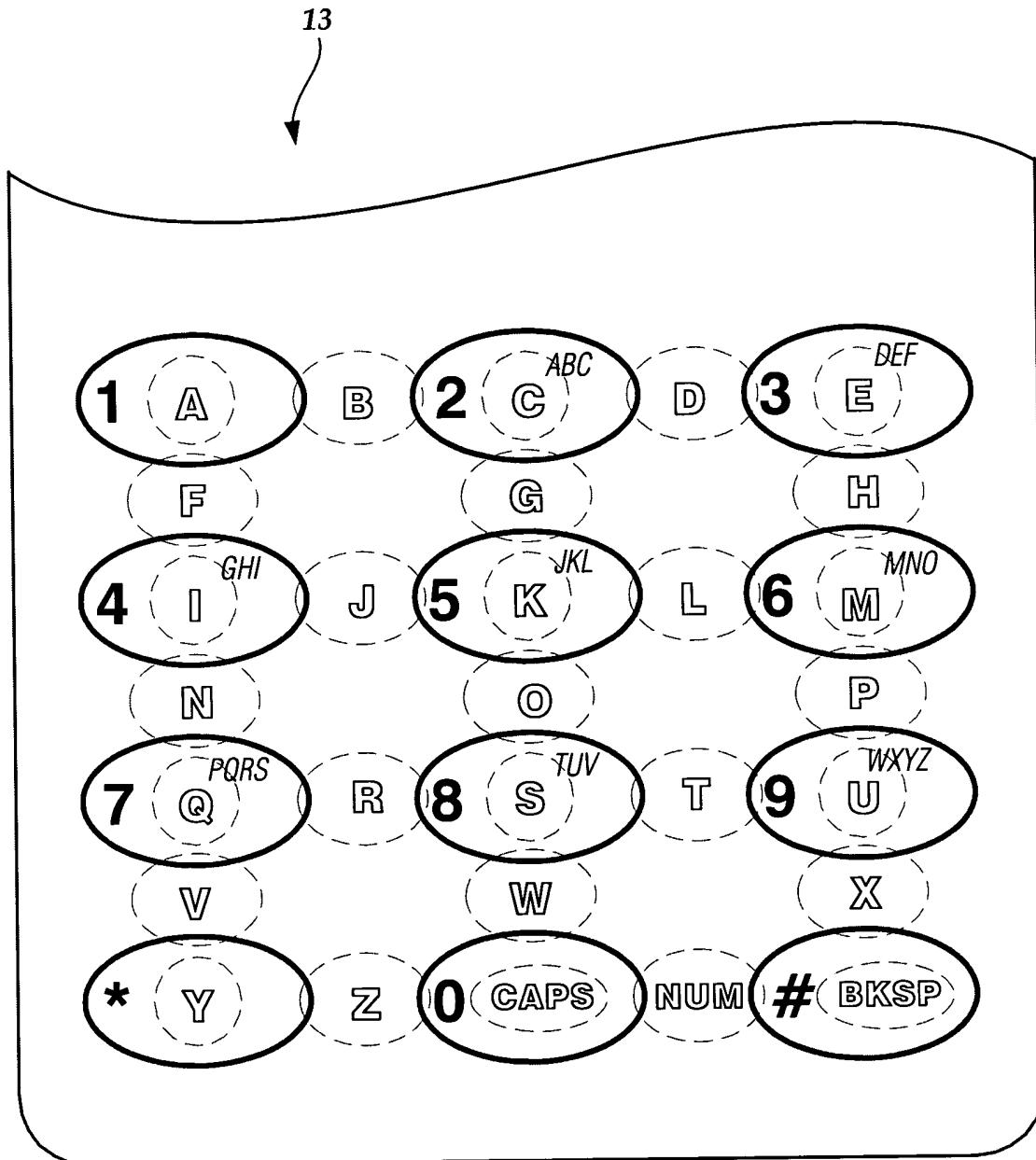


Fig.2.

3/5

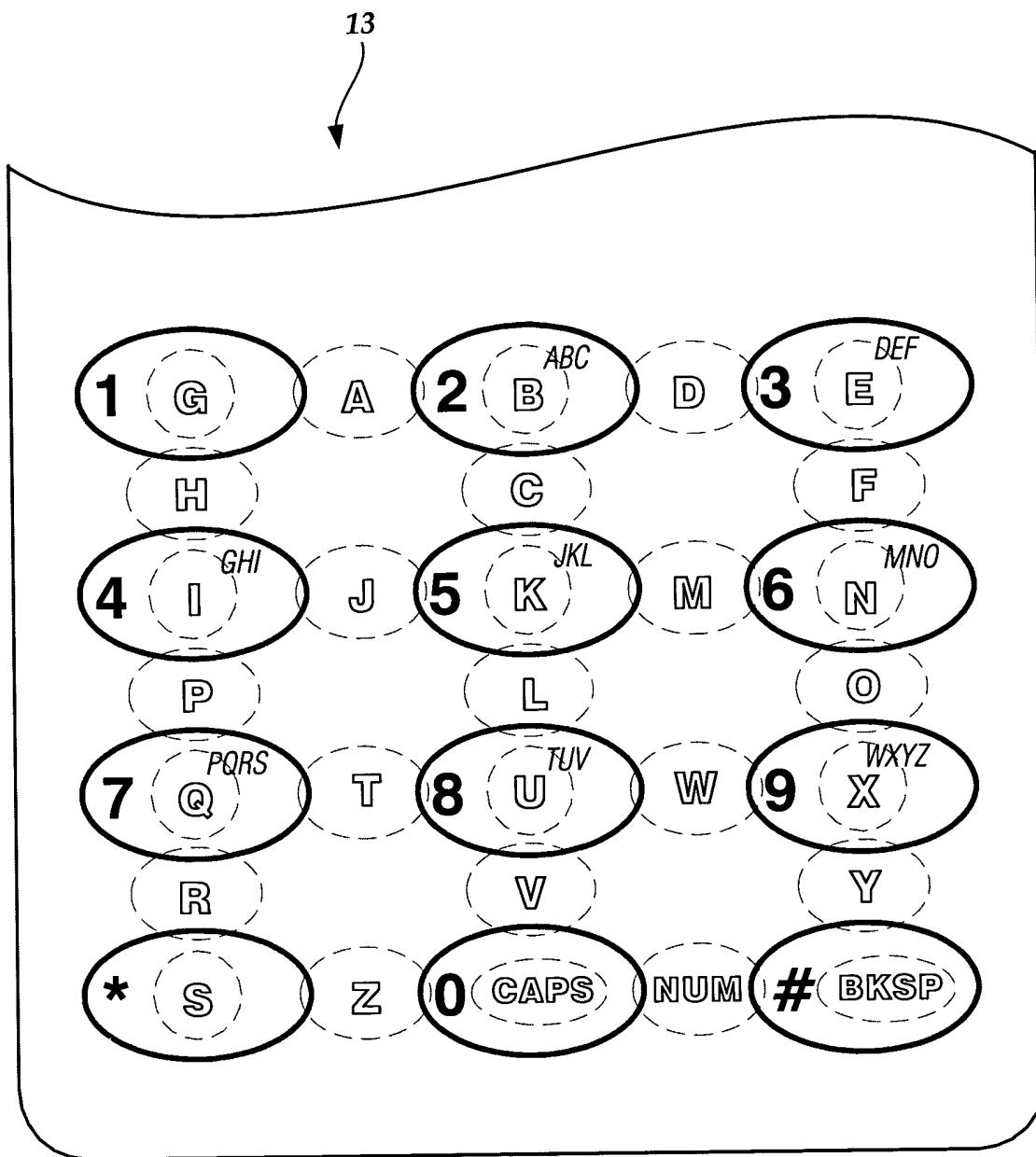


Fig.3.

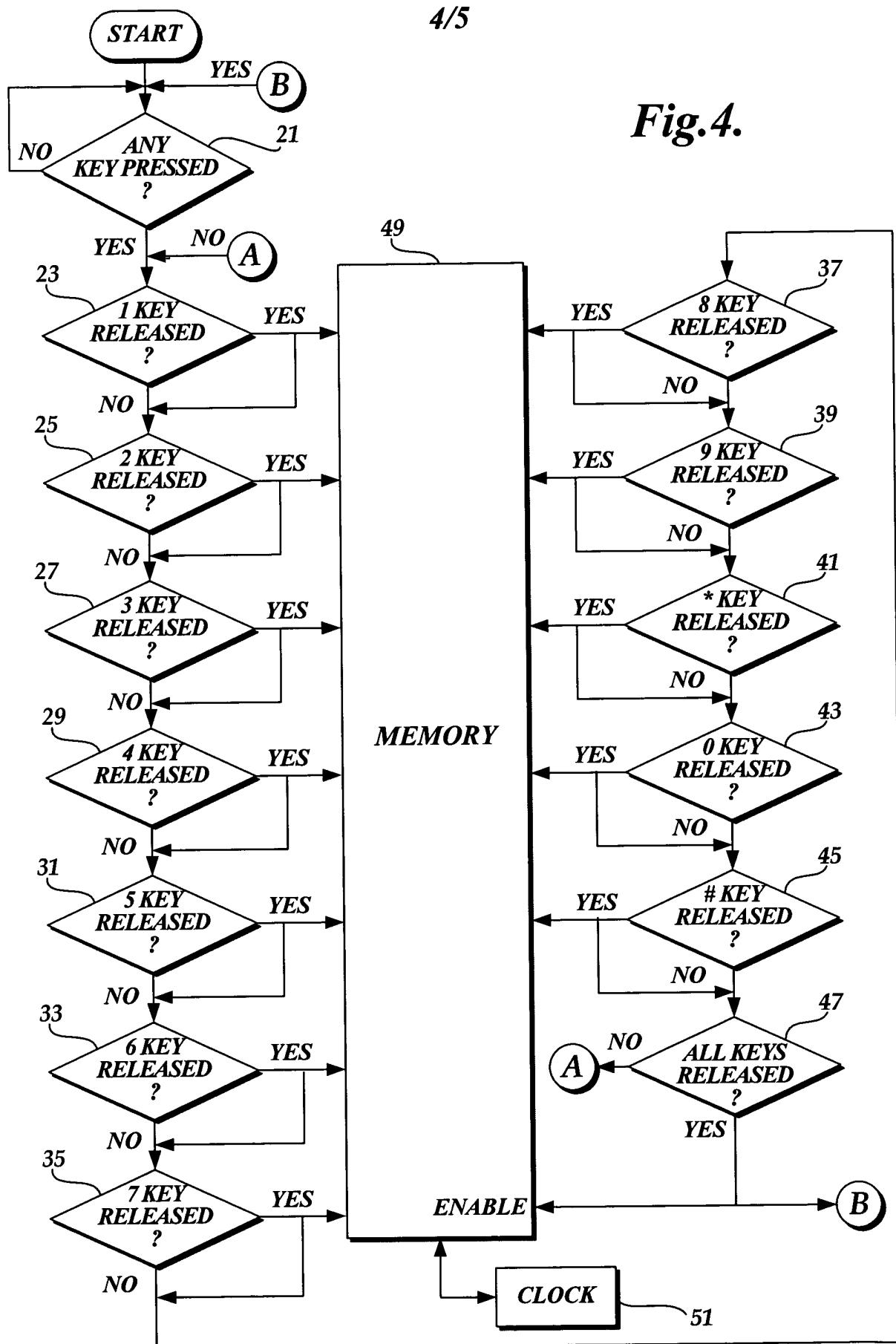


Fig.4.

**A SINGLE FINGER OR THUMB METHOD
FOR TEXT ENTRY VIA A KEYPAD**

5/5

```

graph TD
    A{HAS ONLY ONE KEY RELEASE BEEN DETECTED?} -- NO --> B[DETERMINE TIME BETWEEN KEY RELEASES]
    B -- 73 --> C{IS TIME LESS THAN XMS?}
    C -- NO --> D[DETERMINE AND ENABLE MODE BASED ON KEYS]
    C -- YES --> E{DO KEYS HAVE A SPECIFIC FUNCTION?}
    E -- NO --> F[PERFORM FUNCTION]
    E -- YES --> G[CHANGE MODE OF OPERATION]
    G -- 69 --> H{DO KEYS INDICATE A MODE CHANGE?}
    H -- NO --> I[DETERMINE AND DISPLAY LETTER ASSOCIATED WITH KEYS]
    H -- YES --> J[DETERMINE AND DISPLAY LETTER ASSOCIATED WITH KEYS]
    J -- 85 --> K{DO KEYS INDICATE A MODE CHANGE?}
    K -- NO --> L[END]
    K -- YES --> M[CHANGE MODE OF OPERATION]
    M -- 83 --> N[DETERMINE AND DISPLAY LETTER ASSOCIATED WITH KEYS]
    N -- 81 --> O{DO KEYS INDICATE A MODE CHANGE?}
    O -- NO --> P[DETERMINE AND DISPLAY LETTER ASSOCIATED WITH KEYS]
    O -- YES --> Q[CHANGE MODE OF OPERATION]
    Q -- 67 --> R{DO KEYS INDICATE A MODE CHANGE?}
    R -- NO --> S[DETERMINE AND DISPLAY LETTER ASSOCIATED WITH KEYS]
    R -- YES --> T[CHANGE MODE OF OPERATION]
    T -- 63 --> U[PERFORM FUNCTION]
    U -- 65 --> V{HAS KEY A SPECIFIC FUNCTION?}
    V -- NO --> W[DETERMINE AND DISPLAY LETTER ASSOCIATED WITH KEYS]
    V -- YES --> X[PERFORM FUNCTION]
  
```

Fig. 5.